

# aiwa

**COMPACT DISC/STEREO RECEIVER  
RECEPTOR ESTEREO  
AMPLI-TUNER STÉRÉO  
STEREO-RECEIVER  
RICEVITORE STEREO**

## AV-X300

**OPERATING INSTRUCTIONS  
MANUAL DE INSTRUCCIONES  
MODE D'EMPLOI  
BEDIENUNGSANLEITUNG  
ISTRUZIONI PER L'USO**

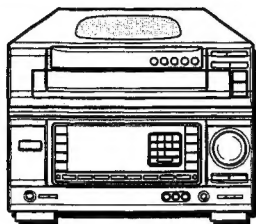
En (English)

## Welcome to the Aiwa AV-X300

Congratulations on your purchase of an Aiwa Compact Disc/Stereo Receiver. To optimize the performance of this system, please take the time to read through these Operating Instructions and become familiar with the operating procedures.

### Check your unit and accessories

AV-X300 Compact disc/stereo receiver



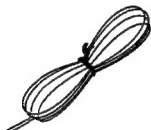
Remote control



HT-M301 Remote control extender



FM antenna



MW/LW antenna



Operating Instructions, etc.

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## PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

### Installation

- 1 Water and moisture** — Do not use this unit near water, such as near a bath, sink, swimming pool, or the like.
- 2 Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
- 3 Mounting surface** — Place the unit on a flat, even surface.
- 4 Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from the each side.
  - Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
  - Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.
- 5 Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
- 6 Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
- 7 Condensation** — Moisture may form on the CD pickup lens when:
  - The unit is moved from a cold spot to a warm spot
  - The heating system has just been turned on
  - The unit is used in a very humid room
  - The unit is cooled by an air conditioner
 When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
- 8 Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

### Electric Power

- 1 Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
- 2 AC power cord**
  - When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
  - Never handle the AC power plug with wet hands, as this could result in fire or shock.
  - Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
  - Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.
- 3 When not in use** — Unplug the AC power cord from the AC power plug if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

### Maintenance

Clean the unit only as recommended in the Operating Instructions.

### Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged
  - Foreign objects or liquid have got inside the unit
  - The unit has been exposed to rain or water
  - The unit does not seem to operate normally
  - The unit exhibits a marked change in performance
  - The unit has been dropped, or the cabinet has been damaged
- DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.**

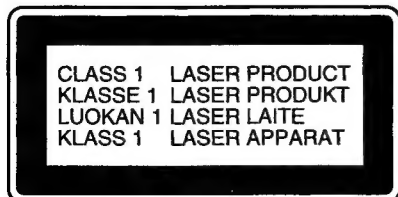
## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.



## CAUTION!



Invisible laser radiation when open and interlocks defeated. Avoid exposure to beam.

## ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

## VAROITUS!

Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

## VARNING!

Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsätta för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

# CONNECTIONS

## Before connecting the AC cord

The rated voltage of your unit shown on the rear panel is 230 V AC. Check that the rated voltage matches your local voltage.

## IMPORTANT

Connect the speakers, antennas, and all other external equipment first. Then connect the AC cord at the end.

## CONNECTING EQUIPMENT

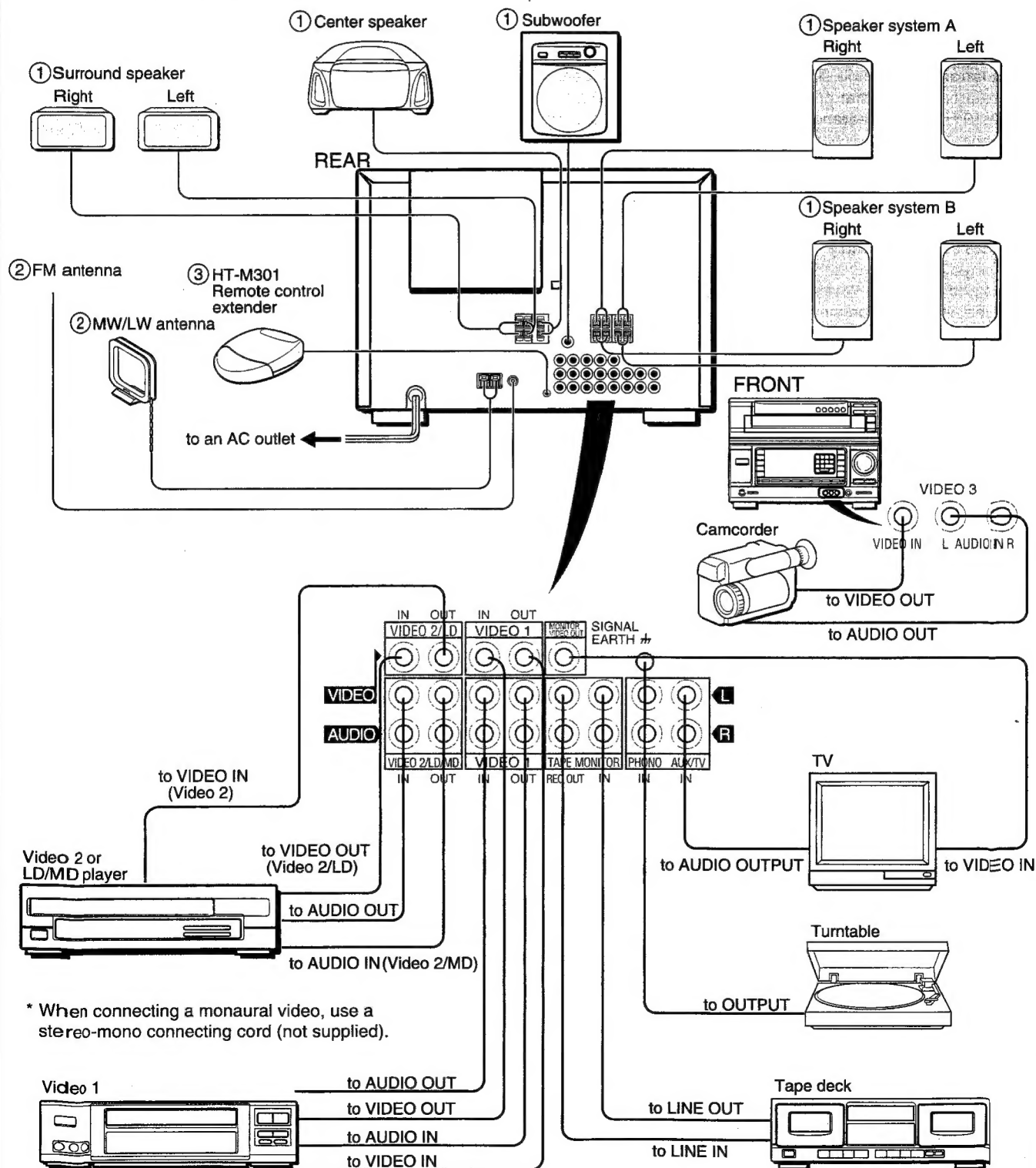
Jacks and plugs of the connecting cord are color-coded as follows:

Red jacks and plugs : For the right channel of audio signals  
White jacks and plugs: For the left channel of audio signals  
Yellow jacks and plugs: For video signals

## NOTE

Insert the plugs fully into the jacks. Loose connections may produce a humming sound or other noise interference.

The numbers in the illustration below correspond to the following details.

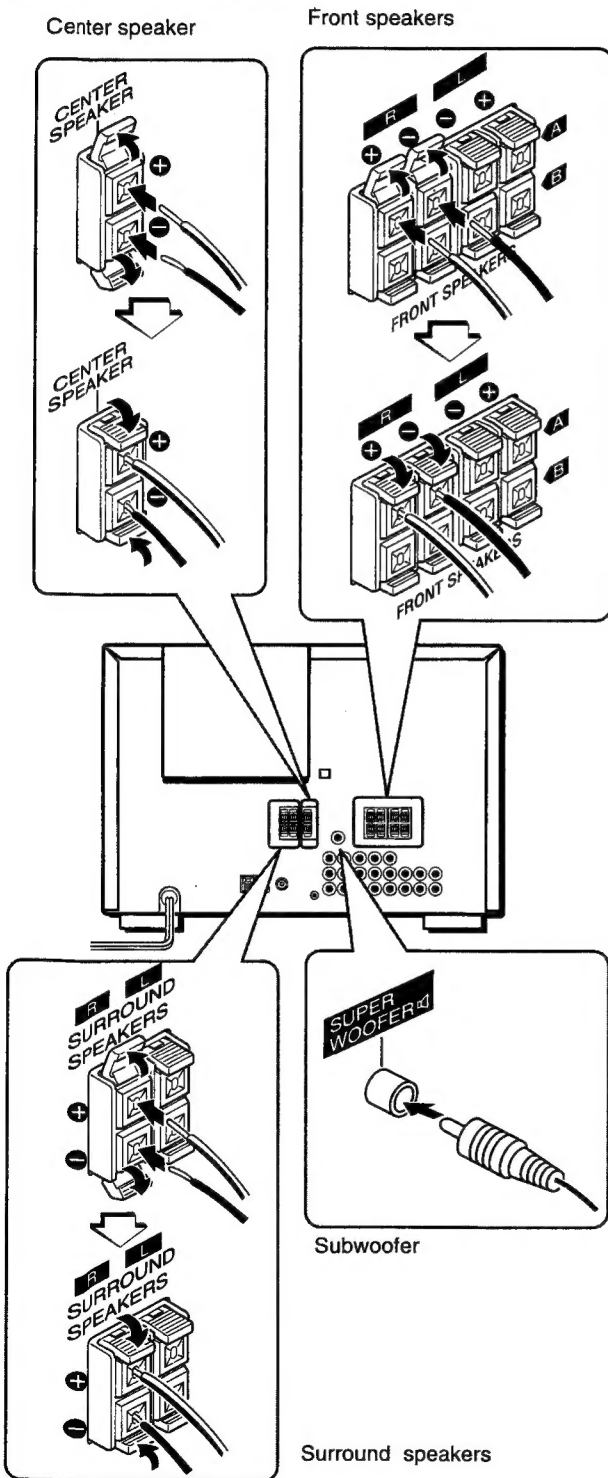


## CONNECTING SPEAKERS ①

Connect front speakers (system A and B), a center speaker and surround speakers to the unit.

Connect the front speaker cords to the FRONT SPEAKERS terminals, the center speaker cord to the CENTER SPEAKER terminals and the surround speaker cords to the SURROUND SPEAKERS terminals.

For more powerful bass, connect a subwoofer with a built-in amplifier to the SUPER WOOFER  $\nabla$  jack.

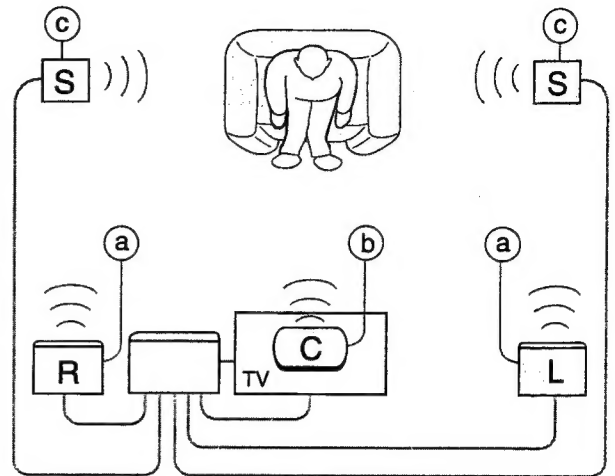


### NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in the SPEAKER(S) terminals.
- Be sure to use the speakers of specified ohms.
- Do not leave objects generating magnetism near the speakers.
- When using a subwoofer, select the speaker system A (see page 6). Otherwise no sound can be heard from it.

## POSITIONING THE SPEAKERS

Position the speakers to make the most of the Dolby Pro Logic or DSP effect (see "DOLBY PRO LOGIC").



### (a) Front speakers

### (b) Center speaker

Position in the center of the two front speakers. In addition, position on or below the TV set, if connecting a TV set to the unit.

### (c) Surround speakers

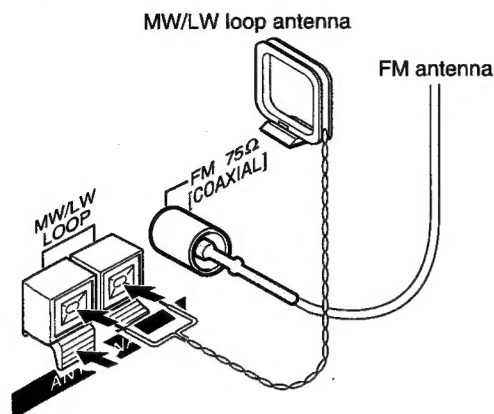
Place the surround speakers directly to the side of or slightly behind the listening area. Align them horizontally, about 1 meter (3.2 feet) above ear height.

### NOTE

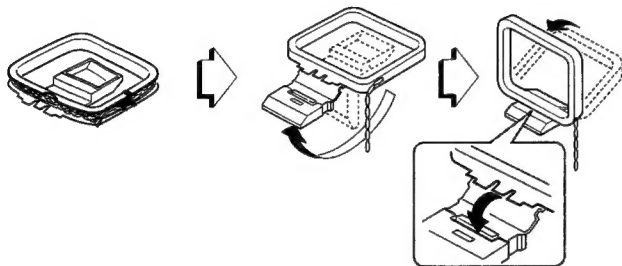
- No sound is heard from the center and surround speakers when the Dolby Pro Logic and DSP are set to off.
- Sound is heard from the center speaker mainly when the Dolby Pro Logic is set to on.

## CONNECTING THE SUPPLIED ANTENNAS ②

Connect the FM antenna to the FM 75  $\Omega$  terminals and the MW/LW antenna to the MW/LW LOOP terminals.



**To stand the MW/LW loop antenna on a surface**  
Fix the claw to the slot as shown in the illustration.



### To position the antennas

#### FM unipolar antenna:

Extend fully and position for the best possible reception. The use of an outdoor antenna is recommended for better reception.

#### MW/LW loop antenna:

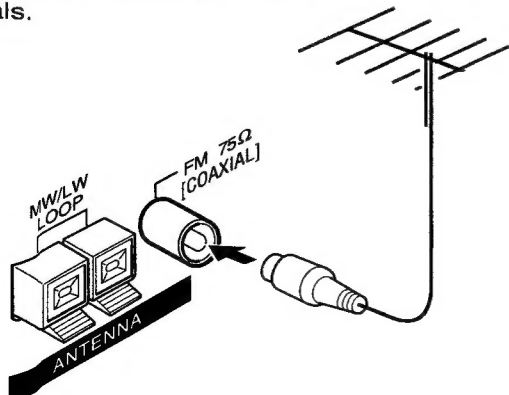
Position to find the best direction.

### NOTE

- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW antenna near other external equipment, the unit itself, the remote control extender, the AC power cord or speaker cords, as noise will be picked up.
- Do not unwind the MW/LW loop antenna wire.

## CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended. Connect the outdoor antenna to the FM 75  $\Omega$  terminals.



## CONNECTING THE SUPPLIED REMOTE CONTROL EXTENDER ③

Connect the HT-M301 remote control extender to the TO REMOTE CONTROL EXTENDER jack on the rear panel.



### NOTE

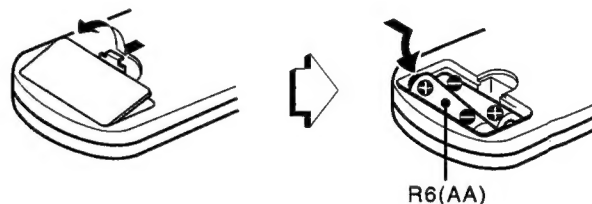
Position the supplied remote control extender so that the line of sight between the remote control extender and the connected equipment will not be obstructed by a rack or opaque glass.

## REMOTE CONTROL

This remote control system can memorize other remote control signal codes (see "MEMORIZING SIGNAL CODES"), and allows you to operate external equipment with it through the supplied remote control extender.

### Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



### When to replace the batteries

The maximum operational distance between the remote control and the sensor on the unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

### Using the remote control

The instructions in this manual refer mainly to the buttons on the main unit. Buttons on the remote control with the same names as those on the main unit can be used as well.

### NOTE

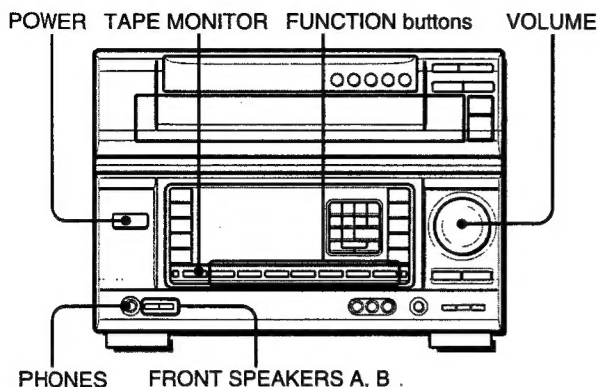
- If the unit is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor in the display window is exposed to intense light, such as direct sunlight.
  - Other remote controls are used nearby (those of television, etc.)

### CD DIGITAL OUT (OPTICAL) jack on the rear panel

The unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (digital amplifier, DAT deck, MD recorder, etc.).

Remove the dust cap from the CD DIGITAL OUT (OPTICAL) jack. Then, connect an optical cable plug to the CD DIGITAL OUT (OPTICAL) jack. When the CD DIGITAL OUT (OPTICAL) jack is not being used, attach the supplied dust cap.

## BEFORE OPERATION



### Turn the unit on.

Press one of the FUNCTION buttons (TUNER, PHONO, AUX/TV, CD, VIDEO 1, VIDEO 2, VIDEO 3) or the TAPE MONITOR button. Playback of the inserted disc begins, or the previously tuned station is received (Direct Play Function). The POWER button is also available.

### NOTE

When turning the unit on:

- Turn the VOLUME control toward MIN. Otherwise, the speakers may be damaged
- Operation is impossible for four seconds

### To select the front speaker system

To use speaker system A: Set the FRONT SPEAKERS A button to **ON**.

To use speaker system B: Set the FRONT SPEAKERS B button to **ON**.

To use both speaker systems: Set both the buttons to **ON**. Set the button(s) to **OFF** to turn off the speaker system(s).

### NOTE

As the front speaker systems A and B are connected in series:

- The sound will be slightly decreased when using both speaker systems
- No sound can be heard if the FRONT SPEAKERS A and B buttons are set to **ON** when only one speaker system is connected

### Flash window

The window on the top of the unit lights up or flashes while the unit is being powered on. To turn off the light, press the STOP button while pressing the CD button. To turn back on, repeat the above.

### Using the headphones

Connect headphones to the PHONES jack with stereo standard plug (ø6.3 mm, 1/4 inch). Be sure to set the FRONT SPEAKERS A and B buttons to **OFF**. Otherwise sound is output from the speakers.

### NOTE

When using the headphones, set the Dolby Pro Logic and DSP system to off.

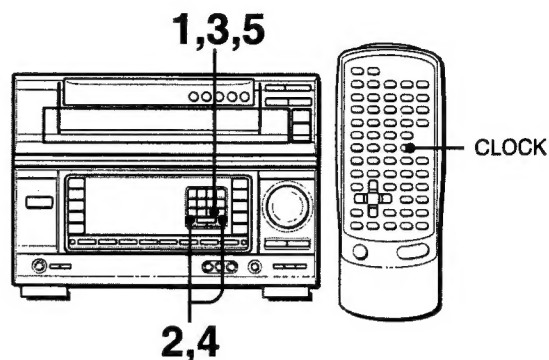
### After use

Press the POWER button to turn off the unit. The display changes to the clock.

## SETTING THE CLOCK

The exact time is automatically set during RDS reception. See page 13 for detail.

When you want the clock set manually, follow the steps below.



When the AC cord is connected for the first time, the clock on the display flashes.

**Set the time as follows while the power is off.**

### 1 Press the SET button.

The hour flashes.



### 2 Press the DOWN▼ or UP▲ button to designate the hour.

### 3 Press the SET button to set the hour.

The hour stops flashing and the minute starts flashing.

### 4 Press the DOWN▼ or UP▲ button to designate the minute.

### 5 Press the SET button to set the minute and complete setting.

The minute stops flashing on the display and the clock starts from 00 second.

### To correct the current time

Press the POWER button to turn the unit off. Press the SET button and carry out steps 1 to 5 above.

### To display the current time

Press the CLOCK button on the remote control. The clock is displayed for 4 seconds.

### To switch to the 24-hour standard

Press the POWER button while pressing the UP▲ or DOWN▼ button.

Repeat the same procedure to restore the 12-hour standard.

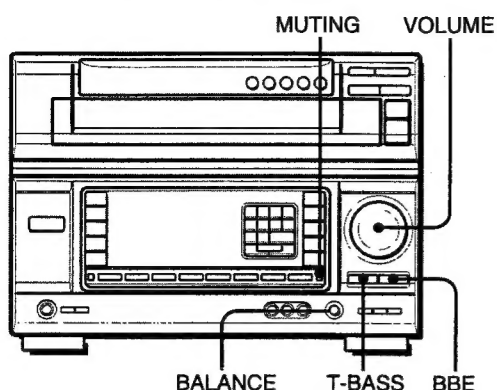
### If the clock display flashes while the power is off

This is caused by a power interruption. The current time needs to be reset.

If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase needs to be reset.

## SOUND

### CUSTOM AUDIO ADJUSTMENT



#### VOLUME CONTROL

Turn the VOLUME control on the unit, or press the VOLUME buttons on the remote control.

##### To adjust the left/right balance

Turn the BALANCE control.

##### To mute the sound temporarily

Press the MUTING button (-20 dB).

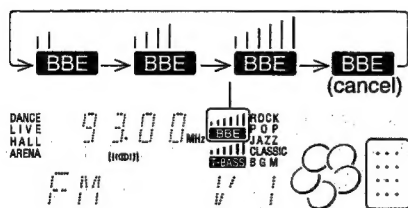
"MUTE ON" appears on the display for four seconds. While muting the sound, the selected FUNCTION button flashes. Press the MUTING button again to restore the sound.

#### BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound.

##### Press the BBE button.

Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



#### NOTE

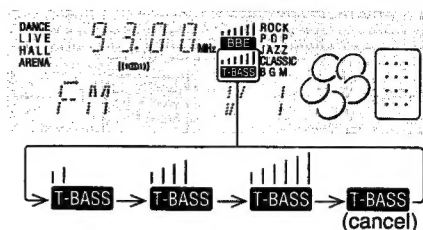
The BBE system is automatically canceled when Dolby Pro Logic is turned on.

#### SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.

##### Press the T-BASS button.

Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



#### NOTE

Low-frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low-frequency sound is originally emphasized. In this case, cancel the T-BASS system.

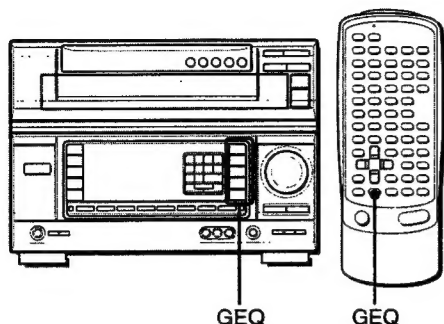
#### SOUND ADJUSTMENT DURING RECORDING

The output volume and tone (except BBE) of the speakers or headphones may be freely varied without affecting the level of the recording.

##### Recording with the BBE

The desired source can be recorded with the BBE function to enhance the clarity of high-frequency sound. When playing back a tape recorded with BBE, it is recommended that BBE be set to off.

## ELECTRONIC GRAPHIC EQUALIZER



This unit provides the following five different equalization modes.

**ROCK:** Powerful sound emphasizing treble and bass

**POP:** More presence in the vocals and midrange

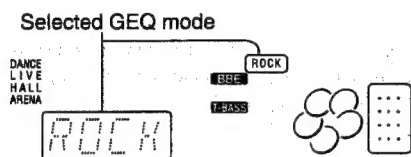
**JAZZ:** Accented lower frequencies for jazz-type music

**CLASSIC:** Enriched sound with heavy bass and fine treble

**BGM:** Calm tone with suppressed bass and treble

**Press one of the GEQ (Graphic Equalizer) buttons.**

The selected mode name appears on the display for two seconds, and the selected mode remains lighting on the display.



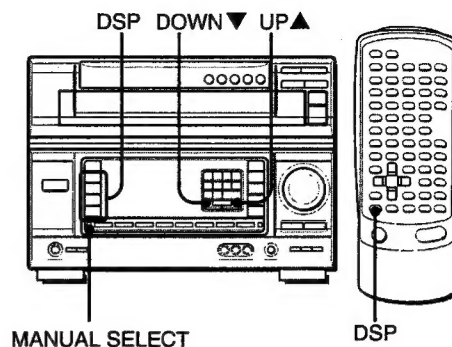
**To cancel the selected mode**

Press the selected button again. "GEQ OFF" appears on the display.

**To select with the remote control**

Press the GEQ button repeatedly until the desired equalization mode is displayed.

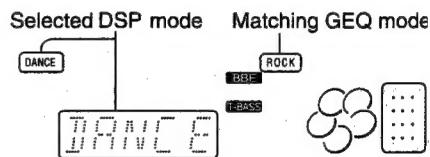
## DSP SURROUND



The DSP (Digital Signal Processor) surround circuits can recreate the effect of sounds reflected from walls or ceilings, to obtain the sound presence of real environments. There are four modes with matching graphic equalization modes. Equalization modes are selected automatically and can also be selected or turned off to suit your preference.

**Press one of the DSP buttons (DANCE, LIVE, HALL or ARENA).**

The selected mode name appears on the display for two seconds, and the selected DSP and matching GEQ modes remain lighting on the display.



**When the music source is monaural**

Select LIVE to obtain a simulated stereo effect. When DANCE, HALL or ARENA is selected, no sound will be heard from the surround speakers.

**To cancel the selected mode**

Press the selected button again. "DSP-OFF" appears on the display. Even if canceling the selected DSP mode, the matching or selected GEQ mode still remains. While the DSP surround system is off, no sound is heard from the surround speakers.

**To select with the remote control**

Press the DSP button repeatedly until the desired DSP mode is displayed.

**To adjust the volume of the surround speakers**

Press the MANUAL SELECT button once. "SUR" is displayed for four seconds. Press the UP▲ or DOWN▼ button while "SUR" is displayed.

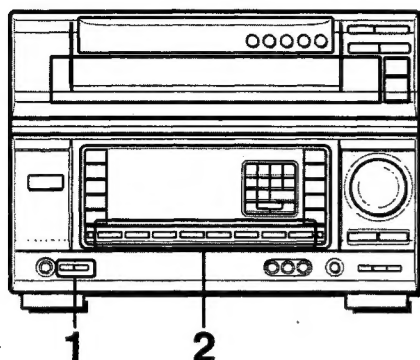
Note that the Dolby Pro Logic surround speakers level is also changed (see page 19).

### NOTE

The DSP system is automatically canceled when the DOLBY PRO LOGIC is turned on.

En

## SELECTION OF AUDIO/VIDEO SOURCE



### 1 Select the speaker system with the FRONT SPEAKERS A and B buttons.

Press one of the FRONT SPEAKERS buttons.

### 2 Select the program source.

Press one of the FUNCTION buttons or the TAPE MONITOR button.

| To listen to or watch | The button pressed                |
|-----------------------|-----------------------------------|
| Tape                  | TAPE MONITOR                      |
| Radio                 | TUNER                             |
| Record                | PHONO                             |
| Television, etc.      | AUX/TV                            |
| Compact disc          | CD                                |
| Video (LD or MD)      | VIDEO 1, VIDEO 2 (LD/MD), VIDEO 3 |

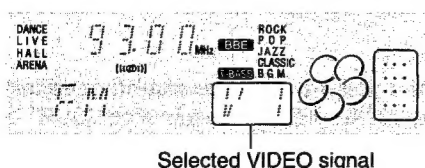
#### NOTE

When using a turntable with a built-in equalizer amplifier, set the switch of the equalizer amplifier to off. See the instructions of the turntable for further information.

### 3 Start the selected program source.

### 4 Adjust the sound.

#### About the video signal to the monitor or TV



The selected video signal output through the MONITOR VIDEO OUT jack is indicated on the display.

#### To change a source name on the display

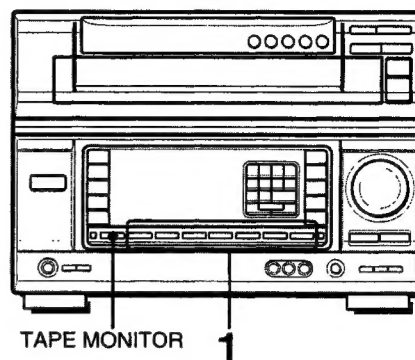
With the power on, press the POWER button while pressing the AUX/TV or VIDEO 2 button.

Repeat the procedure to select one of the names shown below.

AUX or TV: For the AUX/TV button

VIDEO 2, LD or MD: For the VIDEO 2 button

## RECORDING AN AUDIO SOURCE



### 1 Select the program source to be recorded.

Press one of the FUNCTION buttons.

### 2 Set the tape deck or MD recorder to the recording mode.

### 3 Start the selected program source.

#### To monitor recorded sound during recording (when the connected tape deck is a three-head system)

Press the TAPE MONITOR button. "TAPE ON" appears on the display for four seconds, and then the source name selected in step 1 comes back on. To cancel the tape monitor, press it again so that "TAPE OFF" appears.

#### NOTE

- Any sound control except the BBE system has no effect on recording (see page 7).
- Recorded sound can be monitored on the instant if the connected tape deck is a three-head system.

## PRESETTING STATIONS

The unit can store a total of 32 preset stations. Presetting allows you to tune in to a station directly. Stations are assigned preset numbers, beginning from 1 in consecutive order for each band (FM, MW, LW).

### Automatic presetting:

This unit has a function for reception of \*\*RDS (Radio Data System) and other stations.

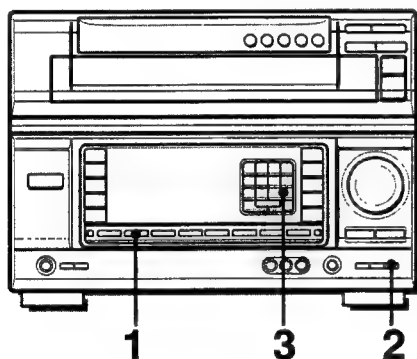
FM RDS stations take priority over other stations if there are more than 32 receivable stations.

### Manual presetting with Manual tuning, Auto Search tuning and Direct tuning:

You can select stations to be preset from all the bands.

## AUTOMATIC PRESETTING

The tuner scans through the receivable frequency range and stores stations automatically.



- 1 Press the TUNER button.
- 2 Keep the RT button pressed for three seconds until AUTO SET flashes.
- 3 Press the SET button while AUTO SET flashes.  
The tuner searches for a station, beginning with the FM band. When a tuned station is stored, the selected preset number appears on the display.



The search continues on the MW and LW bands if preset numbers are still available.

When automatic presetting has been completed, the display returns to the first preset station.

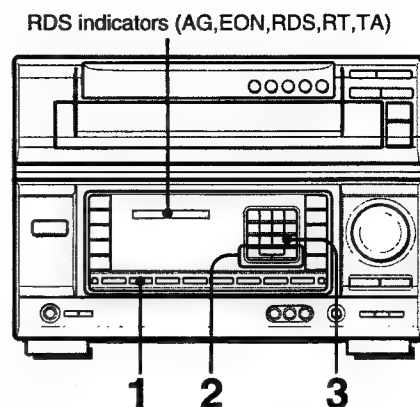
### When the tuner detects \*\* identical RDS stations with alternative frequencies

Only the station with the stronger signal is stored. Before storing an RDS station, the tuner checks first whether the same stations on the other frequencies are present, and stores the station with the best reception.

### NOTE

When automatic presetting is done, all previously stored stations are cleared.

## MANUAL PRESETTING



- 1 Press the TUNER button repeatedly to select a band.



- 2 Press the DOWN▼ or UP▲ button to select a station (Manual tuning).

Each time the button is pressed, the frequency changes.

### a When tuning in to an FM RDS station

The RDS indicator lights up.

After TUNE on the display goes out, the Program Service station name (\*3 PS) is displayed.



Program Service station name (PS)

### b When tuning in to the other stations

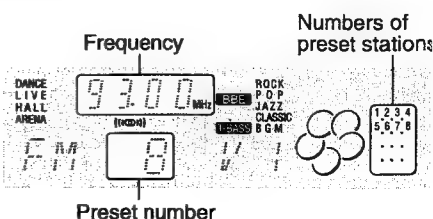
After TUNE on the display goes out, the band is displayed.



• During FM stereo reception, ((100)) lights.

- 3 Press the SET button to store the station.

The selected preset number appears.



- 4 Repeat steps 1 to 3 to store the stations.

The next station will not be stored if a total of 32 preset stations have already been stored for all bands.

To search for a station quickly with the **DOWN▼** or **UP▲** button (Auto Search tuning)

Keep one of the buttons pressed until the tuner starts searching for a station. The search stops when the tuner tunes in to a station.

To stop the Auto Search manually, press one of the buttons.

- The Auto Search may not stop at stations with very weak signals.

To tune in a station directly with the numeric buttons (Direct tuning)

- 1 Keep the **TUNER** button pressed until “\_” flashes on the display.



- 2 Press the appropriate numeric buttons to tune in to the desired station.

Example:

To tune in to 106.50 MHz, press 1, 0, 6, 5 and 0 buttons.

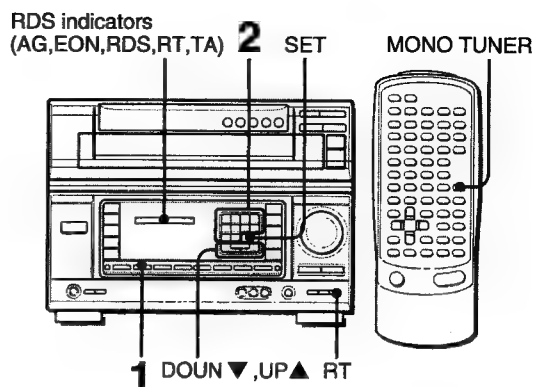
To tune in to 95.25 MHz, press 9, 5, 2 and 5 buttons.

To cancel the Direct tuning mode, press the **▼DOWN** or **▲UP** button.

#### NOTE

- When entering a frequency out of tuning range, the value flashes for two seconds and then goes off. Check the frequency and repeat step 2 correctly.
- When entering a frequency not covered by the tuning interval, the value is automatically rounded up or down to the closest one covered by it.

## RECEPTION BY PRESET NUMBER



- 1 Press the **TUNER** button to select a band.

- 2 Press the numeric buttons to select a preset number.

Example:

To select preset number 25, press 2 and 5.

To select preset number 7, press 0 and 7.

#### To clear a preset station

Select the preset number of the station to be cleared. Then, press the **SET** button, and press the **SET** button again within four seconds.

The preset numbers of all stations in the band with higher numbers are also decreased by one.

#### To tune in to a station which is not preset

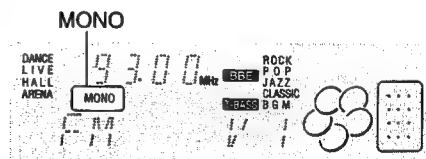
Press the **TUNER** button to select a band, and press the **DOWN▼** or **UP▲** button to select a station (Manual tuning).

#### To play a tuned station when the power is off (Direct Play Function)

Press the **TUNER** button. The power is turned on and the tuned station is played.

#### When an FM stereo broadcast contains noise

Press the **MONO TUNER** button on the remote control to display MONO.



Noise is reduced, although reception is monaural.

To restore stereo reception, press the button so that the **MONO** indicator goes out.

#### NOTE

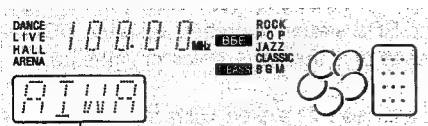
RDS functions may not work correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

### To display radio text (\*4 RT) during RDS reception

When the tuned station is transmitting RT codes, the RT indicator lights up.

In this time, press the RT button once. The RT indicator flashes and text appears on the display.

To return to the normal display, press the RT button again.



Radio text (RT)

If the tuned station is not transmitting RT codes, the RT indicator does not light up. In this case, NO RT is displayed when you press the RT button.

### \*1 RDS

Today many stations transmit so-called RDS (Radio Data System) codes that contain a variety of additional information along with the regular sound signals.

### \*2 Identical RDS stations with alternative frequencies (AF)

This is a list of alternative frequencies which gives information on the various transmitters broadcasting the same program in the same reception area. It enables receivers equipped with memory to store the list, to reduce the time for switching to another transmitter.

### \*3 Program service station name (PS)

This is a name consisting of not more than 8 alphanumeric characters, which is displayed in order to inform listeners what program service is being broadcast by the radio station.

Example: BBC 1

### Characters which can be displayed

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
0123456789<>?'\* @ [ ] - + /

If a character transmitted by the broadcast is not applicable to receivers, a space is left instead.

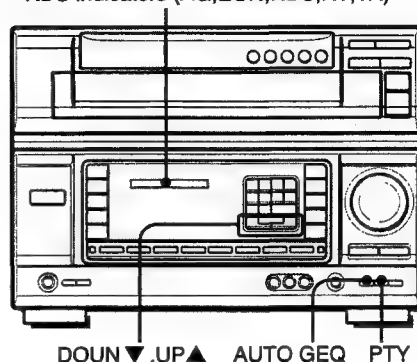
### \*4 Radiotext (RT)

Information such as the cast list of play or the title of a song is shown on the display.

## SEARCHING WITH THE HELP OF RDS CODES

Each RDS station identifies the type of program (\*5 PTY) which it is currently broadcasting. If you specify a PTY, the unit can automatically detect a suitable station from the preset stations. In addition, the \*6 EON (Enhanced Other Network) service works in some areas, so that searching is made much faster.

RDS indicators (AG, EON, RDS, RT, TA)



### TO DISPLAY THE PTY

Press the PTY button once during RDS reception.



Program type (PTY)

Programs are classified as follows:

TRAFFIC, NEWS, AFFAIRS (current affairs), INFO (information), SPORT, EDUCATE (education), DRAMA, CULTURE, SCIENCE, VARIED, POP M (pop music), ROCK M (rock music), M.O.R.M. (middle of the road music), LIGHT M (light classical), CLASSICS (serious classical), OTHER M (other music), ALARM

### NOTE

- If program type information is not being transmitted, NO PTY is displayed.
- If undefined program type information is being transmitted, UNDEFINE is displayed.
- The unit identifies TRAFFIC with one of the program types.

### TO SEARCH FOR A SPECIFIED PTY

#### 1 Press the PTY button.

The program type of the currently tuned station is displayed.

#### 2 Within 4 seconds, press the DOWN ▽ or UP ▲ button to select a program type.

#### 3 Within 4 seconds, press the PTY button again.

The search automatically checks every preset station. After identifying a suitable station, the station will be selected.

### EON service for the PTY search

When EON service works to transmit PTY, a suitable station is detected without checking every preset station. When a station transmits EON information, it takes about 30 to 60 seconds for the unit to decode the EON information. After decoding the information, the EON indicator lights up.

### When a station is not found

NOT FOUND is displayed and the unit returns to the previous station.

### When a traffic program code (\*7 TP) is received

The TA indicator lights up.

The tuned station regularly broadcasts traffic information, although it may not be broadcasting currently. Wait for a while. Traffic announcement will be made.

To search only for stations broadcasting currently, see "RECEPTION OF TA STATIONS" below.

## RECEPTION OF \*8 TA STATIONS

Only stations which are currently broadcasting traffic information are received.

### Keep the PTY button pressed until TA is displayed.

The TA station will be selected and the TA indicator lights up.

### To search for the other TA stations

Keep the PTY button pressed again for 4 seconds.

## OTHER SERVICE OF RDS CODES

### Auto GEQ function

The equalization curve is switched automatically to match the music program type of an RDS station.

### Press the AUTO GEQ button.

The AG indicator lights up.

To cancel, press it again.

GEQ matching PTY:

| PTY      | GEQ     |
|----------|---------|
| POP M    | POP     |
| CLASSICS | CLASSIC |
| ROCK M   | ROCK    |
| LIGHT M  | JAZZ    |
| M.O.R.M. | BGM     |
| Others   | off     |

The selected GEQ can be changed to suit your preference by pressing the GEQ buttons. During this time, the Auto GEQ function is canceled.

### Clock-time (\*9 CT)

The CT function provides the unit with information about the local time. The CT function works whenever a CT station is received.

### If you have not set the clock (the clock flashes on the display)

The current time can be set automatically by tuning in to an RDS station. If no RDS station is preset, keep the DOWN▼ or UP▲ button pressed until the RDS indicator lights up.

### If the clock does not agree with the broadcast time

RDS signal will update the clock time every hour on the hour only if the set clock time is within RDS time by -2 minutes 59 seconds or +3 minutes 59 seconds.

#### \*5 Program type identification (PTY)

PTY allows selection of listening by one of 15 or more program types rather than by a station.

#### \*6 Enhanced other networks information (EON)

EON information gives the receiver a cross reference to other stations and allows the receiver to switch from the currently tuned station to another RDS station. Alternative frequencies, the PS name, traffic program or PTY can be transmitted.

#### \*7 Traffic program identification (TP)

This is a code which informs the receiver that a tuned station regularly broadcasts traffic information.

#### \*8 Traffic announcement identification (TA)

This is a code which informs the receiver that a tuned station is currently broadcasting relevant local traffic and travel information.

#### \*9 Clock-time (CT)

CT function provides an accurate clock signal which is self-adjusting to time zones and seasonal time changes.

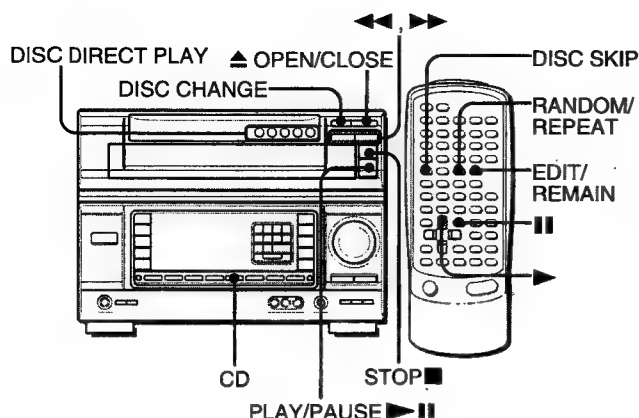
### To change the MW tuning interval

The default setting of the MW tuning interval is 9 kHz/step. If you use the unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval as follows. Hold down the TUNER button and press the POWER button immediately. Note that the unit is set to Direct tuning mode if the TUNER button is pressed and held down for about two seconds. To reset the interval, repeat this procedure.

### NOTE

When the MW tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

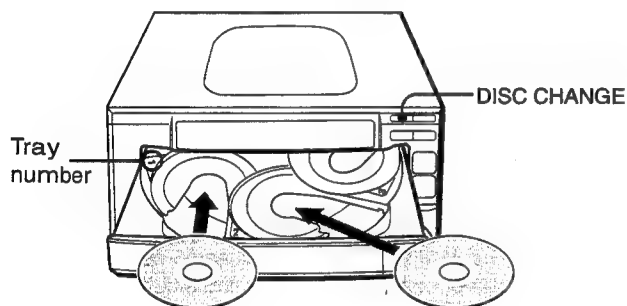
## BASIC PLAY



## LOADING DISCS

Press the CD button, then press the ▲ OPEN/CLOSE button to open the disc compartment. Load disc(s) with the label side up.

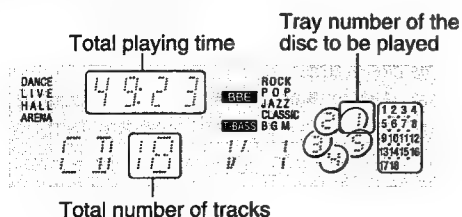
To load one or two discs, place the disc(s) on the tray(s) in the direction of the arrows as illustrated.



To load three to five discs, press the DISC CHANGE button to rotate the trays after placing two discs. Place the next disc on empty tray. Each time the DISC CHANGE button is pressed, the trays rotate and one disc can be placed.

After placing the discs, press the ▲ OPEN/CLOSE button to close the disc compartment.

The display shows the information of the disc to be played.

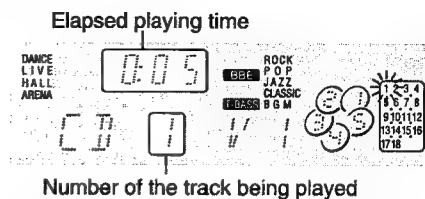


## PLAYING DISCS

Load discs.

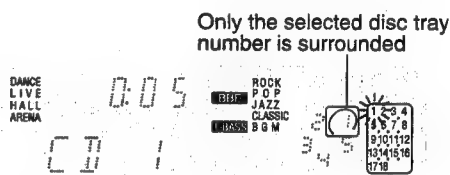
To play all discs in the disc compartment, press the PLAY/PAUSE ►|| button.

All discs are played once.



To play one disc only, press one of the DISC DIRECT PLAY buttons.

The disc with the selected tray number is played once.



To stop play, press the STOP ■ button.

To pause play, press the PLAY/PAUSE ►|| button. To resume play, press again.

To search for a particular point during playback, keep the ◀◀ or ▶▶ button pressed and release the button at the desired point.

To skip to the beginning of a track during playback, press the ◀◀ or ▶▶ button repeatedly.

To remove discs, press the ▲ OPEN/CLOSE button.

You can only remove the two discs that face you. When the disc to be removed does not face you, press the DISC CHANGE button repeatedly.

To play or pause play with the remote control

Press the ► button to play a disc, and the || button to pause a play. To resume play, press || button again.

To start play when the power is off (Direct Play Function)

Press the CD button. The power turns on and play of the loaded disc begins.

To replace discs before play, press the ▲ OPEN/CLOSE button to open the disc compartment.

To check the remaining time

Press the EDIT/REMAIN button on the remote control during play. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, press the EDIT/REMAIN button.

To skip discs

Press the DISC SKIP button on the remote control to skip a disc and press the PLAY/PAUSE ►|| button to play the next disc. Play begins with the next disc and all the discs are played once including the skipped disc.

Selecting a track

- 1 Press one of the DISC DIRECT PLAY button to select a disc.
- 2 Press the numeric buttons to select a track.

Example:

To select the 25th track, press the 2 and 5 buttons.

To select the 6th track, press the 0 and 6 buttons.

The selected track starts to play and play continues to the end of that disc.

## Replacing discs during play

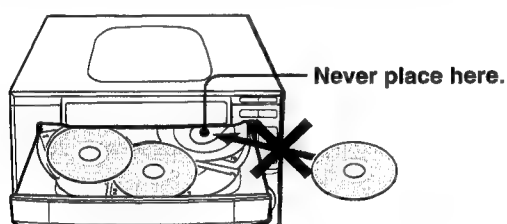
While one disc is playing, the other discs can be replaced without interrupting play.

- 1 Press the DISC CHANGE button.  
Two discs can be replaced.
- 2 Remove the discs and replace with other discs.  
To replace the other two discs, press the DISC CHANGE button again.
- 3 Press the ▲ OPEN/CLOSE button to close the disc compartment.

### NOTE

- When loading an 8-cm (3-inch) disc, make sure to put it onto the inner circle of the tray precisely. Otherwise, the disc may be damaged or the disc compartment will not open. If it does not open, please consult your Aiwa dealer for repair.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- When transporting the unit, remove the discs from the trays.
- When replacing the discs during play, do not replace discs other than those facing you.

If you place a disc on the empty right inner tray, and then press the ▲ OPEN/CLOSE button, "ERROR" is displayed and the disc compartment may not close. Remove the disc on that tray.



## RANDOM/REPEAT PLAY

Use the remote control.

### RANDOM PLAY

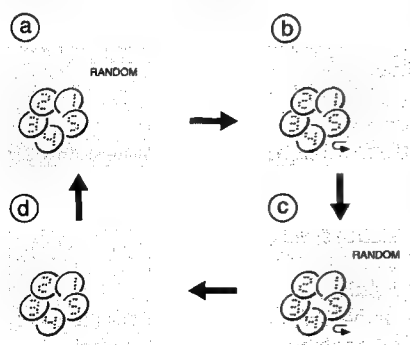
All the tracks on the selected disc or on all the discs can be played randomly.

### REPEAT PLAY

A single disc or all the discs can be played repeatedly.

**Press the RANDOM/REPEAT button.** Each time it is pressed the function can be selected cyclically as shown below.

- |               |                      |
|---------------|----------------------|
| Ⓐ RANDOM play | Ⓒ RANDOM/REPEAT play |
| Ⓑ REPEAT play | Ⓓ cancel             |

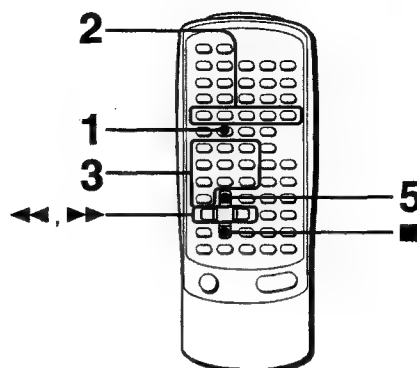


### NOTE

- Even if the ◀◀ button is pressed during random play, a previously played track cannot be skipped. The unit returns to the beginning of the current track only.
- Direct selection of the tracks with the numeric buttons is not possible.

## PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

- 1 Press the PRGM button in stop mode.

"PRGM" flashes on the display.



- 2 Press one of the DISC DIRECT PLAY buttons to select a disc.

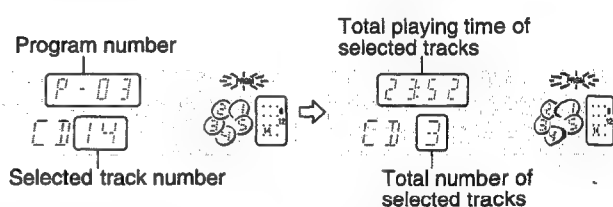
The selected disc is indicated in red on the display.  
Go to the next step when the tray stops rotating.

- 3 Press the numeric buttons to program a track.

**Example:**

To select the 25th track, press the 2 and 5 buttons.

To select the 6th track, press the 0 and 6 buttons.



- 4 Repeat steps 2 and 3 to program other tracks.

- 5 Press the ▶ button to start play.

### To check the program

Each time the ◀◀ or ▶▶ button is pressed in stop mode, a disc number, track number, and program number will be displayed.

### To clear the program

Press the ■ button in stop mode.

### To add tracks to the program

Before playing, repeat steps 2 and 3. The track will be programmed after the last programmed track.

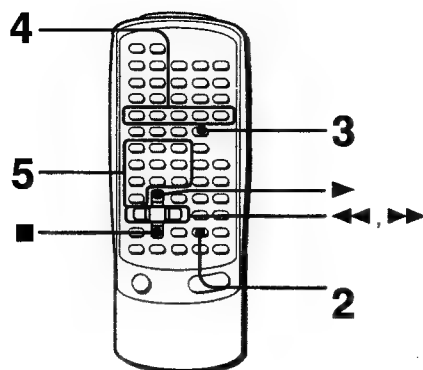
### To change the programmed tracks

Clear the program and repeat all the steps again.

### NOTE

- During programmed play, the EDIT/REMAIN, DISC CHANGE, DISC DIRECT PLAY and numeric buttons do not function.
- RANDOM play does not perform during programmed play.

## AI EDIT RECORDING



The AI edit function enables CD recording without worrying about cassette tape length and track length. When a CD is inserted, the unit automatically calculates track lengths. If necessary, the order of tracks is rearranged so that no track is cut short. (AI: Artificial Intelligence)

### NOTE

- AI edit recording does not perform from a point halfway in the tape. The tape must be recorded from the beginning of either side.
- AI edit recording does not perform when recording on an MD player.

Use the remote control from steps 3 to 6.

**1 Insert the tape into the connected tape deck.**

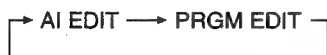
**2 Press the CD button and load the disc(s).**

**3 Press the EDIT/REMAIN button once.**

"AI" flashes and "EDIT" lights up on the display.



Each time it is pressed, the display changes as follows.



**4 Press one of the DISC DIRECT PLAY buttons to select a disc.**

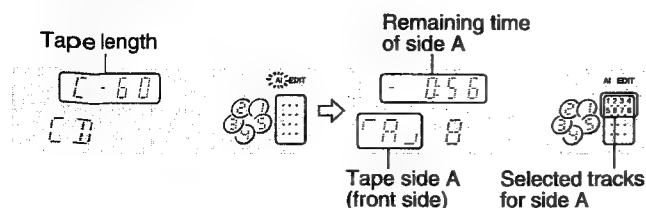
**5 Press the numeric buttons to designate the tape length.**

10 to 99 minutes can be specified.

Example: When using a 60-minute tape, press the 6 and 0 buttons.

In a few seconds, the microcomputer determines the tracks to be recorded on each side of the tape.

- The ◀◀ and ▶▶ buttons are also available to designate the tape length.



**6 First set the connected tape deck to recording mode, then press the ► button on the remote control to start CD play.**

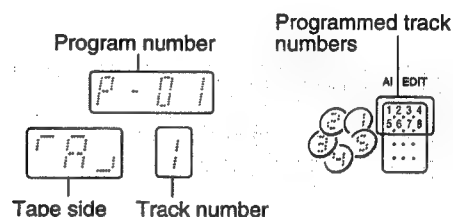
When recording on the front side (side A) ends, playback stops. Repeat the procedure for side B. Be sure to fast-forward or rewind the tape to start from the beginning of the side B.

**To clear the edit program**

Press the ■ button twice so that "AI EDIT" disappears on the display.

**To check the order of the programmed track numbers**

Before recording, press the EDIT/REMAIN button to select side A or B to be checked, and press the ◀◀ or ▶▶ button repeatedly.



**To add tracks from other discs to the edit program**

If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment.

- 1 Press the EDIT/REMAIN button to select side A or B.
- 2 Press one of the DISC DIRECT PLAY buttons to select a disc.
- 3 Press the numeric buttons to select tracks.

A track which has a playing time longer than the remaining time cannot be programmed.

- 4 Repeat steps 2 and 3 to add more tracks.

**Time on cassette tapes and editing time**

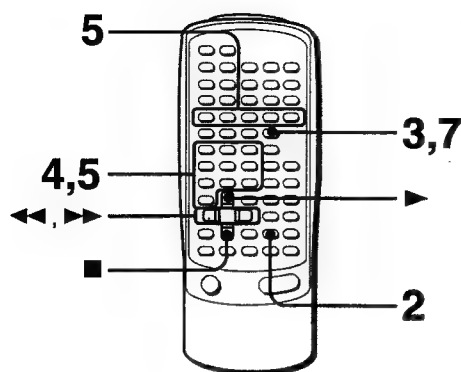
The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

### NOTE

- Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.
- The AI edit function cannot be used with discs containing 31 tracks or more.

En

# PROGRAMMED EDIT RECORDING



Programmed edit function enables CD recording while checking the remaining time on each side of the tape as the tracks are programmed.

## NOTE

- The programmed edit recording does not perform from a point halfway in the tape. The tape must be recorded from the beginning of either side.
- The programmed edit recording does not perform when recording on an MD player.

Use the remote control from steps 3 to 8.

**1 Insert the tape into the connected tape deck.**

**2 Press the CD button and load the disc(s).**

**3 Press the EDIT/REMAIN button twice.**

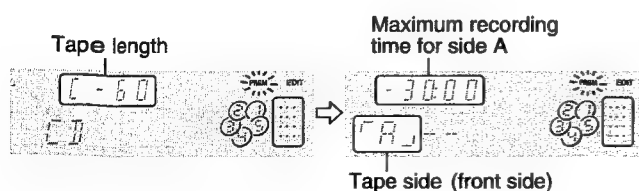
"PRGM" flashes and "EDIT" lights up on the display.



**4 Press the numeric buttons to designate the tape length.**

10 to 99 minutes can be specified.

Example: When using a 60-minute tape, press the 6 and 0 buttons.

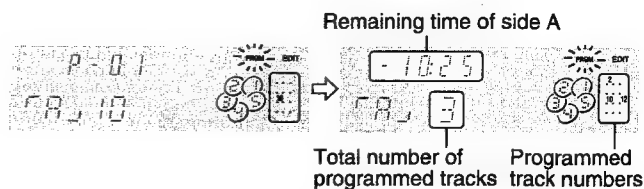


**5 Press one of the DISC DIRECT PLAY buttons to select a disc, and press the numeric buttons to program a track.**

Example: To select the 10th track of disc 2, press the DISC DIRECT PLAY 2 button, then the numeric buttons 1 and 0.

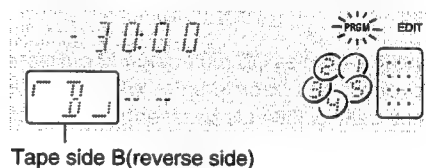
**6 Repeat step 5 for the rest of the tracks for side A.**

A track which has a playing time longer than the remaining time cannot be programmed.



**7 Press the EDIT/REMAIN button to select side B and program the tracks for side B.**

After confirming B on the display, repeat step 5.

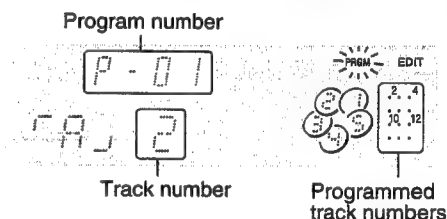


**8 First set the connected tape deck to recording mode, then press the ► button on the remote control to start CD play.**

When recording on the front side (side A) ends, playback stops. Repeat the procedure for side B. Be sure to fast-forward or rewind the tape to start from the beginning of the side B.

**To check the order of the programmed track numbers**

Before recording, press the EDIT/REMAIN button to select side A or B, and press the ◀◀ or ▶▶ button repeatedly.



**To change the program of each side**

Press the EDIT/REMAIN button to select side A or B, and press the ■ button to clear the program of the selected side. Then program tracks again.

**To clear the edit program**

Press the ■ button twice so that "PRGM" and "EDIT" disappear on the display.

## NOTE

Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

## DOLBY PRO LOGIC

The Dolby Pro Logic feature and the center and surround speakers (standard) assure full-scale home theater sound. When playing back laser discs or video software that have been specially recorded with four-channel sound (left, right, center, surround) and steering logic (for directing sound), astonishingly realistic sound surrounds the listener to create a new level of audio/visual entertainment.

Independent control of the four channels allows the listener to enjoy the same type of sound reproduction experienced in movie theaters. Voices are reproduced in the front and center sound field, while ambient sounds like cars and crowds are reproduced on all sides of the listener for an incredibly lifelike audio/video experience. Please read the following carefully to "tune" the system's output to match the characteristics of your listening space.

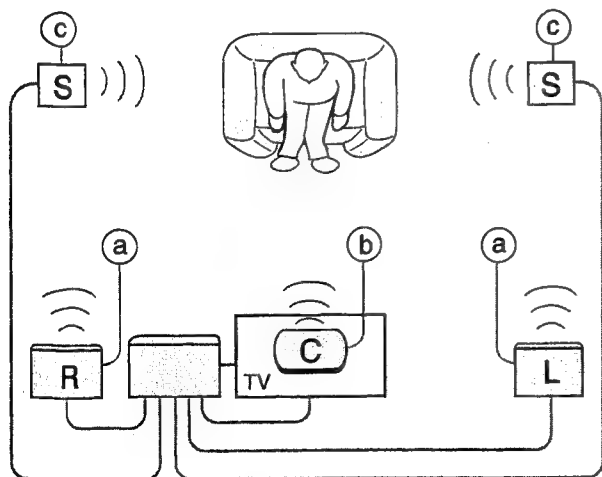
### Check the following:

- Before using the DOLBY PRO LOGIC, adjust the proper balance of the speaker sound levels (see page 19).
- Make sure the speakers are properly connected and positioned (see pages 3 and 4).
- Make sure the TV set and video unit are properly connected (see page 3).
- Make sure the laser disc and video tape, etc., support



## SELECTING DOLBY PRO LOGIC

The optimal Dolby Pro Logic mode depends on the type and placement of the speakers. It is recommended that the optional Aiwa SX-AV526 speaker system should be used for surround and center speakers. Check your current type and placement of the speakers and select the recommended Dolby Pro Logic mode accordingly.



- ① Front speakers
- ② Center speaker
- ③ Surround speakers

### The recommended mode

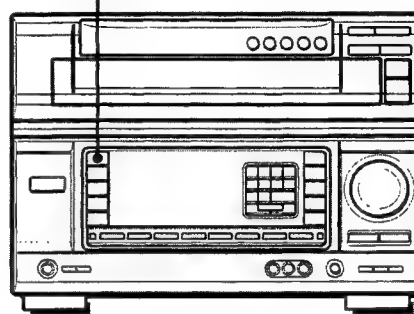
|                                 | Center speaker       |                        |            |
|---------------------------------|----------------------|------------------------|------------|
|                                 | Larger-size          | Smaller-size           | No speaker |
| Surround speaker (Rear speaker) | DOLBY PRO LOGIC-WIDE | DOLBY PRO LOGIC-NORMAL | PHANTOM    |
| No surround speaker             | 3CH LOGIC-WIDE       | 3CH LOGIC-NORMAL       | —          |

**PHANTOM mode:** Select this mode when the center speaker is not connected. All center channel signals are redistributed to the left and right channel speakers.

**3CH LOGIC mode:** Select this mode when the surround speakers are not connected.

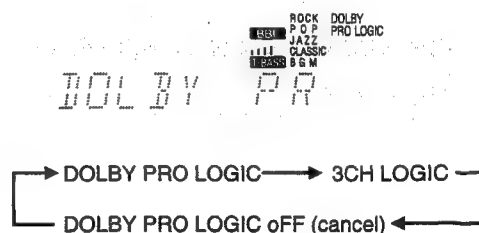
### TO SELECT A DOLBY PRO LOGIC MODE

1,2



#### 1 Press the DOLBY PRO LOGIC button repeatedly to select the appropriate mode.

When selecting the DOLBY PRO LOGIC or 3CH LOGIC mode, the indicator lights up, and the selected mode name runs through on the display. Each time the button is pressed, the mode changes as shown below.



#### 2 Press the DOLBY PRO LOGIC button again and hold it down until the center speaker mode to be selected appears.

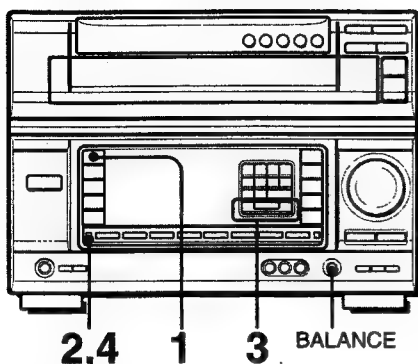
When selecting the DOLBY PRO LOGIC mode in step 1: "NORMAL", "WIDE" and "PHANTOM" appear in turn.

When selecting the 3CH LOGIC mode in step 1: "NORMAL" and "WIDE" appear one after another.

### NOTE

- Depending on the sound source or listening condition, surround effect may not be obtained even when the DOLBY PRO LOGIC is on.
- The full DOLBY PRO LOGIC effect cannot be obtained when using the software without mark. In this case, use the DSP surround system instead (see page 8).
- The DOLBY PRO LOGIC system is automatically canceled when the BBE or DSP system is turned on.

# ADJUSTING SPEAKER LEVEL BALANCE



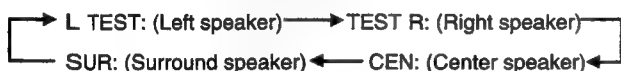
The unit is equipped with a built-in test signal generator called a noise sequencer for easy balance adjustment of all four channels. The sequencer outputs a noise signal that "travels" from channel to channel, enabling the simple adjustment of sound level to achieve the same apparent loudness, at your listening position, from each channel.

- 1 Select the Dolby Pro Logic mode according to your current type and placement of the speakers. (See page 18.)
- 2 Press the MANUAL SELECT (TEST) button and hold it down for about two seconds until "L TEST" appears.

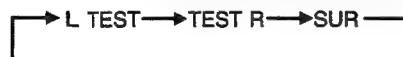


A noise signal is sent to each channel in turn as follows:

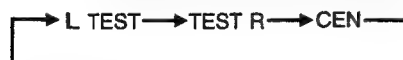
## DOLBY PRO LOGIC NORMAL or WIDE mode



## DOLBY PRO LOGIC PHANTOM mode

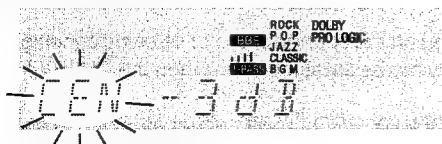


## 3CH LOGIC NORMAL or WIDE mode



- 3 Adjust the sound level of the center and (or) surround speakers.

While "CEN" or "SUR" is displayed, press the UP▲ or DOWN▼ button to adjust the volume of the center or surround speakers to match the level of the left and right speakers.



To adjust the balance between the left and right speakers, use the BALANCE control while "L TEST" or "TEST R" is displayed.

- 4 Press the MANUAL SELECT (TEST) button again to stop the noise signal.

## NOTE

If the surround speakers volume of the DSP is changed (see page 8), the Dolby Pro Logic surround speakers level is also changed.

## About the channels

The left and right speakers create the stereo effect.

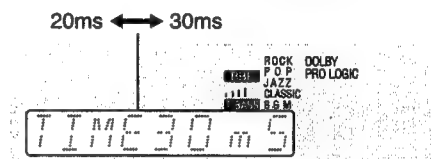
The center speaker helps achieve precise sound positioning over a broad sound field.

The rear-mounted surround speakers enhance the "depth" of the sound field.

## To change the delay time

The surround speakers reproduce sounds a split second after the front speakers. The delay is initially set to 20 ms (milliseconds).

To change this standard delay time, press the MANUAL SELECT (TEST) button twice or three times so that "TIME" is displayed. Then, press the UP▲ or DOWN▼ button. Each time one of the buttons is pressed, the delay time changes as shown below.

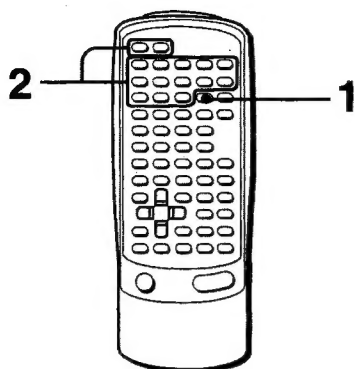


## To change the sound levels after adjusting the balance with the noise sequencer

The sound levels of the center and surround speakers can be adjusted during play of a laser disc or video software.

- 1 Press the MANUAL SELECT (TEST) button once or twice to select "CEN" or "SUR" (center or surround).
- 2 While the "CEN" or "SUR" is displayed, press the UP▲ or DOWN▼ button to adjust the volume.

# MEMORIZING SIGNAL CODES



The supplied remote control allows you to operate the connected equipment as well as the receiver by storing the signal codes of the connected equipment remote control. When operating this remote control, the signal codes stored are transmitted from the supplied remote control extender, and external equipment can be operated. It can store a total of 26 signal codes of the external remote control.

Use the remote control.

## 1 Press the LEARN button.

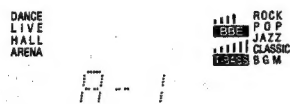
"ADDRESS" flashes on the display window.



## 2 Press one of the MEMORY buttons (A-M), then the ADDRESS 1 or 2 button to designate the button on which the signal code is stored.

The indication you designated appears on the display.

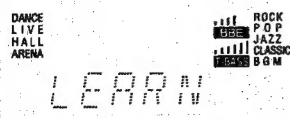
Example: When designating the ADDRESS 1 on the MEMORY A button.



## 3 Pointing the remote control of the connected equipment toward the receiver, press the function button on it to be stored.

"LEARN" will appear when the signal code is stored.

"ERROR" may appear if the signal code is not accepted.



After two seconds, the display returns to step 1.

## 4 Repeat steps 2 and 3 to store other signal codes.

## To stop storing

Press the LEARN button.

## NOTE

- The signal code of the external remote control may not be received:
  - When the signal code to be stored is not standard
  - When a fluorescent lamp lights up near the remote sensor in the display window
- Some signal codes, for example, those of the VOLUME UP/DOWN button, the SEARCH button and the SEND button to transmit the timer recording program may not be memorized correctly. When operating external equipment with the MEMORY and the ADDRESS buttons on which such signal codes are stored, operations may not perform well.
- When designating a button on which the signal code has already been stored, the previous data is erased.

## To operate the connected equipment

Press one of the MEMORY buttons, and the ADDRESS 1 or 2 button on which the signal code has been stored.

## NOTE

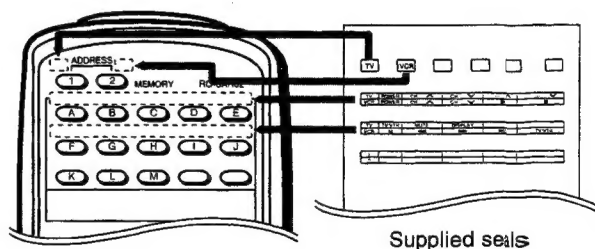
Set the remote control extender so that it points toward external equipment to be operated.

## Using the supplied seals

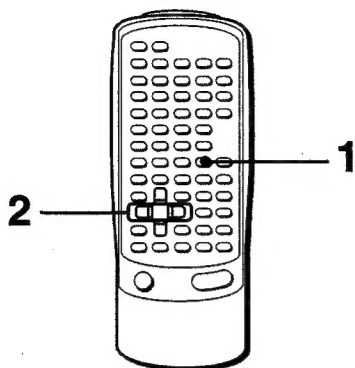
Put the supplied seals on the remote control to identify the buttons and addresses on which the signal codes of external remote controls are stored.

It is recommended to store the signal codes in printed order of the seals. If they do not suit your arrangement or operation, use the supplied blank seals.

Take the seals off the sheet and put them on the remote control.



## SETTING THE SLEEP TIMER



The unit can be automatically turned off at a specified time.

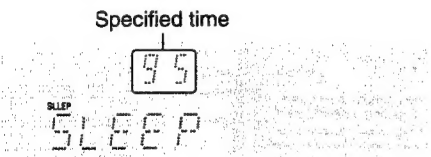
Use the remote control.

### 1 Press the SLEEP button.



### 2 Press the ◀◀ or ▶▶ button within four seconds to specify the amount of time until the power turns off.

Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.



### To check the time remaining until the power turns off

Press the SLEEP button once. The remaining time is displayed for four seconds.

### To cancel the sleep timer

Press the SLEEP button twice so that "SLEEP" on the display disappears.

## CARE AND MAINTENANCE

Occasional care and maintenance of the unit is needed to optimize the performance of your unit.

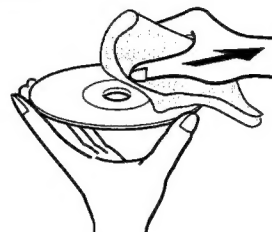
### To clean the cabinet

Use a soft dry cloth.

If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

### Care of discs

- When a disc becomes dirty, wipe the disc from the center out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

# SPECIFICATIONS

## FM tuner section

|                          |                      |
|--------------------------|----------------------|
| Tuning range             | 87.5 MHz to 108 MHz  |
| Usable sensitivity (IHF) | 13.2 dBf             |
| Antenna terminals        | 75 ohms (unbalanced) |

## MW tuner section

|                    |   |
|--------------------|---|
| Tuning range       | 531 kHz to 1602 kHz (9 kHz step)<br>530 kHz to 1710 kHz (10 kHz step) |
| Usable sensitivity | 350 $\mu$ V/m   |
| Antenna            | Loop antenna  |

## LW tuner section

|                    |                    |
|--------------------|--------------------|
| Tuning range       | 144 kHz to 290 kHz |
| Usable sensitivity | 1400 $\mu$ V/m     |
| Antenna            | Loop antenna       |

## Amplifier section

|                           |   |
|---------------------------|---|
| Power output              | <b>[Stereo Mode]</b><br><b>Front</b><br>Rated: 120 W + 120 W (8 ohms, T.H.D. 1%, 1 kHz/DIN 45500)<br>Reference: 140 W + 140 W (8 ohms, T.H.D. 10%, 1 kHz/DIN 45324)<br>DIN MUSIC POWER: 170 W + 170 W<br><b>[Dolby Pro Logic Mode]</b><br><b>Front</b><br>Rated: 100 W + 100 W (8 ohms, T.H.D. 1%, 1 kHz/DIN 45500)<br>Reference: 120 W + 120 W (8 ohms, T.H.D. 10%, 1 kHz/DIN 45324)<br>DIN MUSIC POWER: 170 W + 170 W<br><b>Rear (Surround)</b><br>Rated: 50 W + 50 W (16 ohms, T.H.D. 1%, 1 kHz/DIN 45500)<br>Reference: 60 W + 60 W (16 ohms, T.H.D. 10%, 1 kHz/DIN 45324)<br>DIN MUSIC POWER: 85 W + 85 W<br><b>Center</b><br>Rated: 100 W (8 ohms, T.H.D. 1%, 1 kHz/DIN 45500)<br>Reference: 120 W (8 ohms, T.H.D. 10%, 1 kHz/DIN 45324)<br>DIN MUSIC POWER: 170 W<br>0.07 %<br>(105 W, 1 kHz, 8 ohms, Front) |
| Total harmonic distortion |   |
| Inputs                    | AUDIO IN<br>PHONO: 2.8 mV (50 kohms)<br>TAPE MONITOR: 200 mV (25 kohms)<br>VIDEO 1, VIDEO 2/LD/MD, VIDEO 3, AUX/TV: 250 mV (50 kohms)<br>VIDEO IN: 1 Vp-p (75 ohms)   |

## Outputs

|   |
|---|
| AUDIO OUT (REC OUT): 200 mV (2 kohms)   |
| VIDEO OUT (MONITOR): 1 Vp-p (75 ohms)   |
| SUPER WOOFER: 3.1 V   |
| FRONT SPEAKERS IMP: 8 $\Omega$ (front speakers A and B): accepts speakers of 8 ohms or more |
| SURROUND SPEAKERS IMP: 16 $\Omega$ (surround speakers): accepts speakers of 16 ohms or more |
| CENTER SPEAKER IMP: 8 $\Omega$ : accepts a speaker of 8 ohms or more                        |
| PHONES (stereo jack): accepts headphones of 32 ohms or more                                 |
| -20 dB  |

## Muting

## Compact disc player section

|                       |   |
|-----------------------|---|
| Laser                 | Semiconductor laser ( $\lambda = 780$ nm) |
| D-A converter         | 1 bit dual                                |
| Signal-to-noise ratio | 82 dB (1 kHz, 0 dB)                       |
| Harmonic distortion   | 0.05 % (1 kHz, 0 dB)                      |
| Wow and flutter       | Unmeasurable                              |

## General


|                    |   |
|--------------------|---|
| Power requirements | 230 V AC, 50 Hz   |
| Power consumption  | 210 W   |
| Dimensions         | 360 x 265 x 371 mm<br>(14 <sup>1</sup> / <sub>4</sub> x 10 <sup>1</sup> / <sub>2</sub> x 14 <sup>5</sup> / <sub>8</sub> ) |
| Weight             | 11.65 kg (25 lb 11 oz)  |

Specifications and external appearance are subject to change without notice.

## BBE SYSTEM

The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.  
Under license from BBE sound, Inc.

## DOLBY PRO LOGIC

Manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

## OBSERVERA

Så länge som apparaten är ansluten till nätet flyter en svag ström genom densamma, även då den är avstängd. Om man under en längre tid ej har för avsikt att använda den, drag då ur nätkabeln.

## BEMÆRK

Apparat er stadig forbundet med lysnettet, så længe stikket er tilsluttet til stikkontakten, selv om afbryteren er slået fra. Hvis apparatet ikke bruges i længere tid, skal netledningen trækkes ud.

En

# TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

## GENERAL

### There is no sound.

- Is the AC cord connected properly?
- Is there an incorrect connection? (→ page 3)
- There may be a short circuit in the speaker terminals.  
→ Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?
- Are the FRONT SPEAKERS A and B buttons set correctly? (→ page 6)

### Sound is emitted from one speaker only.

- Is the BALANCE control set appropriately?
- Is the other speaker disconnected?

### Sound is heard at a very low volume.

- Has the MUTING button been pressed?

### An erroneous display or a malfunction occurs.

→ Reset the unit as stated below.

## TUNER SECTION

### There is constant, wave-like static.

- Is the antenna connected properly? (→ page 5)
- Is the signal weak?  
→ Connect an outdoor antenna.

### The reception contains noise interference or the sound is distorted.

- Is the system picking up external noise or multipath distortion?  
→ Change the orientation of the antenna.  
→ Move the unit away from other electrical appliances.

## CD PLAYER SECTION

### The CD player does not play.

- Is the disc correctly inserted? (→ page 14)
- Is the disc dirty? (→ page 21)
- Is the lens affected by condensation?  
→ Wait approximately one hour and try again.

### To reset

If an unusual condition in the display window or malfunction occurs, reset the unit as follows.

- 1 Press the POWER button to turn off the power.
- 2 Press the POWER button while pressing the SET button.

Everything stored in memory after purchase is canceled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord and repeat step 2.

# PARTS INDEX

Instructions about each part on the unit or remote control are indicated on the pages listed below.

(in alphabetic order)

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